

Work Order ID 94654***94654***

Page 1

December-19-12 1:52:29 PM

Item ID: D2012-115-3

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Joggled Bracket

Stop

NS2

Start Date: 12/19/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 1/11/13 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan:

*H*Date: *12/21/12*

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2012-115	B								
100		0.00							
100 Waterjet	FLOW WATER JET								
FLOW CNC Waterjet	Memo	0.00							
<i>304.063</i>	1-Cut as per Dwg Dwg Rev: <i>B</i> Prog Rev: <i>B</i> 2-Deburr if necessary								<i>Jm 13-1-30</i>
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110 QC	Memo	0.00							
Quality Control									
120	QC8- Inspect parts - second check	0.00	<i>(SAS</i> <i>15</i> <i>3-89</i>						
120 QC	Memo	0.00							
Quality Control			<i>RJ 31</i>						

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

OA Closed: Date:

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS										
				Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other								
Part No. _____ NCR No. _____																
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector							
Doc/Data																
Equip/Tooling																
Operator																
Material																
Setup																
Other																
Process																
Supplier																
Training																
Unapproved																
FAULT CATEGORY																
Landing Gear				General												
Bending	General			Bend	General			Grain	General			Ovalized	General			Pressure/Forced
Centre Not Concentric to O/S				BOM/Route				Hardware				Over/Under tolerance				Temperature/Cure
Cracks				Broken/Damaged				Inspection Incomplete				Part Incorrect				Weld
Crushed/Crimped				Burrs				Instructions Incomplete/Unclear				Part Lost/Missing				Wrong Stock Pulled
Cuffs				Contamination				Maintenance				Part Moved				
Heat Treat				Countersink				Mislabeled				Positioned Wrong				
Inspection Strip in Tube				Cut Too Short				Misread				Power Loss/Surge				
Ripples in Bend				Drill Holes				Offset								
Torque Waves in Extrusion				Drawing				Out of Calibration								
Turning Sequence				Finish				Out of Sequence								
Wave/Twist in Tube				Folio				Outside Dimensions								

Work Order ID 94654***94654***

Page 2

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10

Cust Item ID:

Required Date: 1/11/13 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Form as per dwg
NC BRAKE

0.00

130

Brake NC

Memo

10

SB
13/04/03

Brake NC

140

QC5- Inspect part completeness to step on W/O

0.00

Shm

140

QC

Quality Control

Memo

0.00

B4.5

10

150

Identify as per dwg & Stock Location: W/A

0.00

150

Packaging

Packaging

Memo

0.00

10

13-04-08
PC

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS							
Part No. _____	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>							
NCR No. _____	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>	Quality <input type="checkbox"/>							
	Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Other <input type="checkbox"/>							
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data													
Equip/Tooling													
Operator													
Material													
Setup													
Other													
Process													
Supplier													
Training													
Unapproved													
FAULT CATEGORY													
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio				<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
												<input type="checkbox"/> Other	

Work Order ID 94654

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94654

Page 3

Item ID: D2012-115-3

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N900040100

Setup

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NS1

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Stop

NS2

Start Date: 12/19/12 **Start Qty:** 10.00

10

Cust Item ID:

Required Date: 1/11/13 **Req'd Qty:** 10.00

10

Customer:

Reference:

Approvals: **Process Plan:** _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

160

160

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

(3/4/10 90)

MK

13-4-9

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>				
Part No. _____											
NCR No. _____											
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data	<input type="checkbox"/>										
Equip/Tooling	<input type="checkbox"/>										
Operator	<input type="checkbox"/>										
Material	<input type="checkbox"/>										
Setup	<input type="checkbox"/>										
Other	<input type="checkbox"/>										
Process	<input type="checkbox"/>										
Supplier	<input type="checkbox"/>										
Training	<input type="checkbox"/>										
Unapproved	<input type="checkbox"/>										
FAULT CATEGORY											
Landing Gear			General								
Bending	<input type="checkbox"/>	Centre Not Concentric to O/S	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Ovalized	<input type="checkbox"/>	Pressure/Forced	
Cracks	<input type="checkbox"/>		<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Temperature/Cure	
Crushed/Crimped.	<input type="checkbox"/>		<input type="checkbox"/>	Broken/Damaged	<input type="checkbox"/>	Inspection Incomplete	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Weld	
Cuffs	<input type="checkbox"/>		<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Wrong Stock Pulled	
Heat Treat	<input type="checkbox"/>		<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Maintenance	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>		
Inspection Strip in Tube	<input type="checkbox"/>		<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>		
Ripples in Bend	<input type="checkbox"/>		<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Misread	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>		
Torque Waves in Extrusion	<input type="checkbox"/>		<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Offset	<input type="checkbox"/>		<input type="checkbox"/>		
Turning Sequence	<input type="checkbox"/>		<input type="checkbox"/>	Drawing	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>		<input type="checkbox"/>		
Wave/Twist in Tube	<input type="checkbox"/>		<input type="checkbox"/>	Finish	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>		<input type="checkbox"/>		
	<input type="checkbox"/>		<input type="checkbox"/>	Folio	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>		<input type="checkbox"/>		

Picklist Print

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Page 1

Work Order ID: 94654

Parent Item: D2012-115-3

Start Date: 12/19/12

Required Date: 1/11/13

Parent Item Name: Joggled Bracket

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 12.05.29 MADE IN HOUSE DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA 304/316 Sheet .063		Purchased	No			100	sf	220.2560	0.016	0.168421 0.1		Jan 13-1-30	

Location	Loc Qty	Loc Code
MAT020	220.256	
122245	13.156	
123136	207.1	

124428

124428

NCR: Yes / No

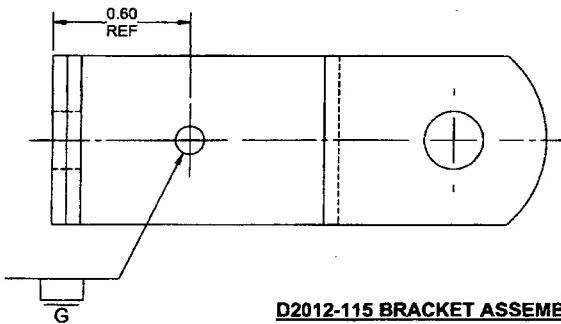
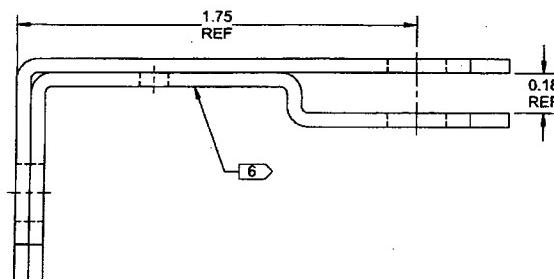
WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

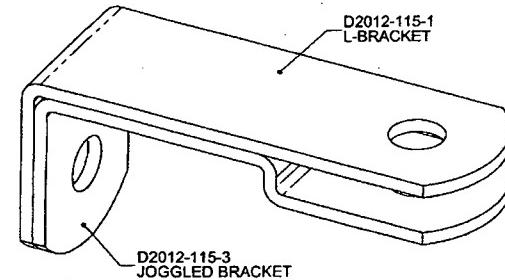
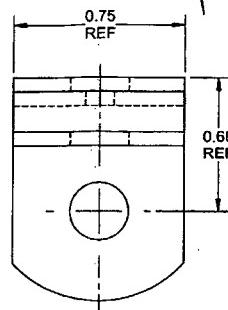
QA Closed: _____ Date: _____

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS									
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>							
Part No. _____															
NCR No. _____															
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector						
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup															
Other															
Process															
Supplier															
Training															
Unapproved															
FAULT CATEGORY															
Landing Gear				General											
Bending				Bend <input type="checkbox"/>				Grain <input type="checkbox"/>			Ovalized <input type="checkbox"/>				Pressure/Forced <input type="checkbox"/>
Centre Not Concentric to O/S				BOM/Route <input type="checkbox"/>				Hardware <input type="checkbox"/>			Over/Under tolerance <input type="checkbox"/>				Temperature/Cure <input type="checkbox"/>
Cracks				Broken/Damaged <input type="checkbox"/>				Inspection Incomplete <input type="checkbox"/>			Part Incorrect <input type="checkbox"/>				Weld <input type="checkbox"/>
Crushed/Crimped.				Burrs <input type="checkbox"/>				Instructions Incomplete/Unclear <input type="checkbox"/>			Part Lost/Missing <input type="checkbox"/>				Wrong Stock Pulled <input type="checkbox"/>
Cuffs				Contamination <input type="checkbox"/>				Maintenance <input type="checkbox"/>			Part Moved <input type="checkbox"/>				
Heat Treat				Countersink <input type="checkbox"/>				Mislabeled <input type="checkbox"/>			Positioned Wrong <input type="checkbox"/>				
Inspection Strip in Tube				Cut Too Short <input type="checkbox"/>				Misread <input type="checkbox"/>			Power Loss/Surge <input type="checkbox"/>				
Ripples in Bend				Drill Holes <input type="checkbox"/>				Offset <input type="checkbox"/>							
Torque Waves in Extrusion				Drawing <input type="checkbox"/>				Out of Calibration <input type="checkbox"/>							
Turning Sequence				Finish <input type="checkbox"/>				Out of Sequence <input type="checkbox"/>							
Wave/Twist in Tube				Folio <input type="checkbox"/>				Outside Dimensions <input type="checkbox"/>							

ITEM	QTY	P/N	DESCRIPTION
1	X	D2012-115	BRACKET ASSEMBLY
2	1	D2012-115-1	L-BRACKET
3	1	D2012-115-3	JOGGED BRACKET



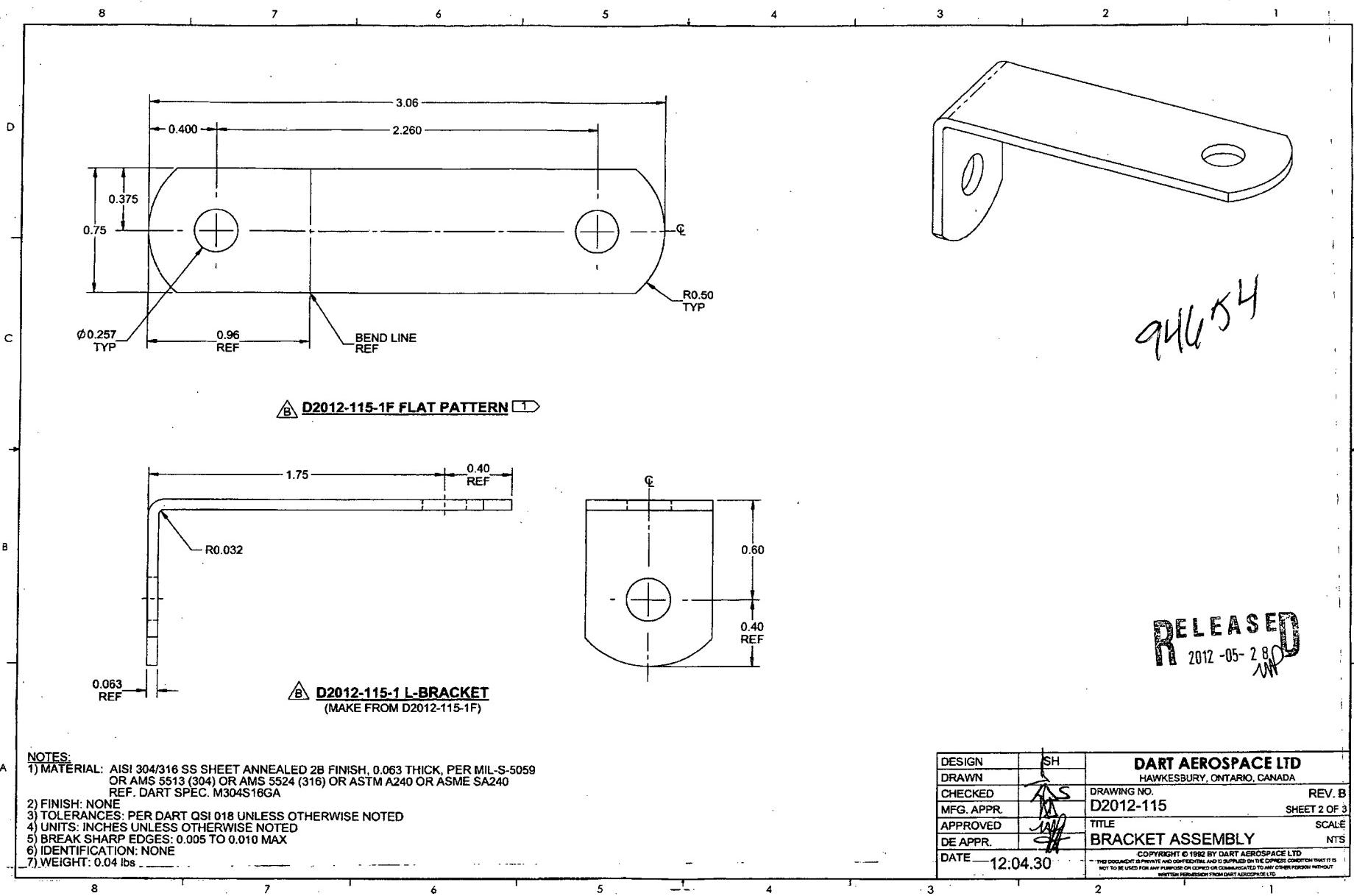
D2012-115 BRACKET ASSEMBLY

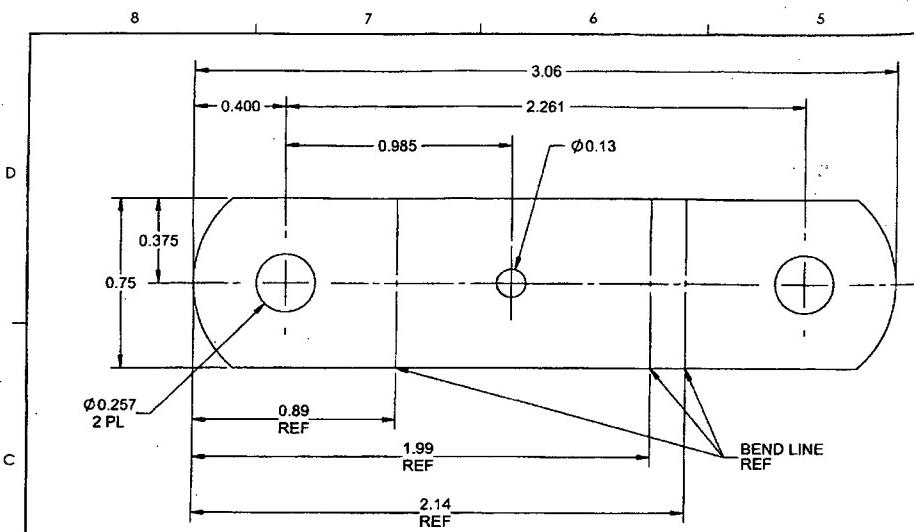


Q4U54
PL12-21-12

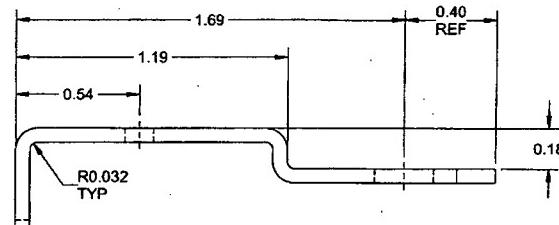
- NOTES:
- 1) MATERIAL: PER SHEETS 2 AND 3
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2012-115" AND BATCH NUMBER "XXXXXX" PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
 - 7) WEIGHT: 0.08 lbs

B	UPDATED TO CURRENT STANDARD/FORMAT; ADDITION OF D2012-115-1-FINE-REF. REASON: FACILITATE MANUFACTURING (REF. PAR12-179).	MB	12.04.30
A	NEW ISSUE	SH	92.06.03
REV.	DESCRIPTION		
DESIGN	SH	DART AEROSPACE LTD	
DRAWN	<i>AS</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AS</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>AS</i>	D2012-115	SHEET 1 OF 3
APPROVED	<i>AS</i>	TITLE	SCALE
DE APPR.	<i>AS</i>	BRACKET ASSEMBLY	NTS
DATE	12.04.30	COPYRIGHT © 1992 BY DART AEROSPACE LTD THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS RESTRICTED FROM EXTERNAL DISTRIBUTION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	





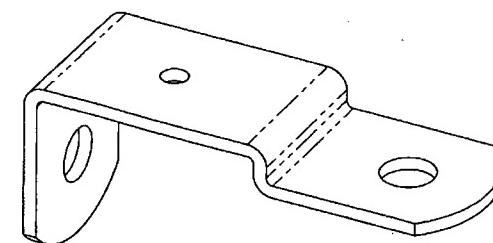
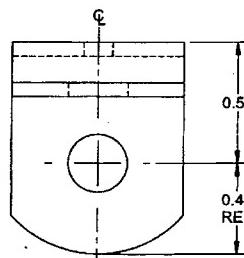
D2012-115-3F FLAT PATTERN



D2012-115-3 JOGGED BRACKET
(MAKE FROM D2012-115-3F)

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET ANNEALED 2B FINISH, 0.063 THICK, PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 REF. DART SPEC. M304S16GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.04 lbs



QUL54

RELEASED
2012-05-28

DESIGN	SH	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	
MFG. APPR.		D2012-115	REV. B
APPROVED		SHEET 3 OF 3	
DE APPR.		TITLE	SCALE
		BRACKET ASSEMBLY	NTS
DATE	12.04.30	COPYRIGHT © 1992 BY DART AEROSPACE LTD	
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DART AEROSPACE LTD	Work Order:	9416-54
Description: L-Bracket	Part Number:	D2012-115-1
Inspection Dwg: D2012-115 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Measured by:	Jm	Audited by:	15 8-89	Preliminary Approval:	
Date:	12-1-88	Date:	13-1-89	Date:	

Rev	Date	Change	Revised by	Approved
A	12.10.05	New Issue	KJ	<i>[Signature]</i>